

704614

NPL-U4-3 L35

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United States Senate
COMMITTEE ON SMALL BUSINESS
WASHINGTON, DC 20510-6350

November 19, 1987

12/15/87

Mr. Steven Lingle
Director of Hazardous Site
Evaluation Division
Environmental Protection Agency
401 M Street S.W.
Washington D. C. 20460

Dear Mr. Lingle:

At the request of one of Senator Bumpers constituents, I am forwarding a cover letter and packet of documents to you for inclusion in the comments on the issue of promulgation of the Arkwood site to the National Priorities list. Thank you for your consideration of these comments.

Sincerely,

Deborah H. Merrick

Deborah H. Merrick
Office of Senator Bumpers

cc: Bill Doshier
Enclosure

9456957

RECEIVED
11/23/87



DOSHIER & BOWERS

BILL F. DOSHIER
DAN R. BOWERS

ATTORNEYS AT LAW

215 WEST RUSH
P.O. BOX 1797

HARRISON, ARKANSAS 72602-1797
November 16, 1987

TELEPHONE
501-741-6166

Mr. Steven Lingle, Director
Hazardous Site Evaluation Division
Environmental Protection Agency
401 M Street S.W.
Washington, DC 20510

RE: Arkwood Site
Omaha, Arkansas
Site No. ARDO84930148

Dear Mr. Lingle:

This firm represents the past and present landowners of the above site. They have been named as PRP's in this case by the Environmental Protection Agency. I believe your file will reflect that the Ormond group is objecting to the EPA determination that this site should be nominated for promulgation to the National Priorities List. Your file should reflect that we have objected to this nomination and have previously met with Dr. Porter and filed some comments with him for inclusion in the record. My clients are firmly convinced that this site is not contaminated to the extent that it meets the requisites for inclusion on the NPL. We object to consideration of this site for nomination to the NPL and desire to present evidence to support our position. In this regard I asked Senator Bumper's office to ascertain if the comment period is still open in this matter and Ms. Debra Merrick of his office has just advised me that you will still receive comments from us on this issue.

Therefore, the Ormond group does desire to submit the following documentation to you at this time supporting our position. The first document that I am submitting herewith is a multi-page listing of the results of sampling and laboratory analysis of approximately 30 samples that were taken from wells and other sites surrounding the Arkwood site in May of 1987. The samples were taken by ERM Southwest, Inc., an engineering firm employed by another PRP herein, Mass Merchandisers, Inc., of Harrison, Arkansas. The laboratory analyses were done by ENSECO and the locations of the samples and the results are reflected in the attached document. For identification purposes I am marking this document Exhibit "A" to this letter. Exhibit "A" reflects that approximately 30 samples were taken from locations

Page Two
November 16, 1987

surrounding the Arkwood site. Your files and maps will probably already reflect the location of the sites and you may already have this information since it was filed with your Dallas office. However, I could not take the chance that this information might be missing from your files. Each sample was tested for soil contamination, groundwater contamination and air contamination. Each sample was not only tested for the presence of pentachlorophenol and creosote (the only chemicals involved in this site), but also all other suspected hazardous chemicals known to modern man. This sampling task cost approximately \$50,000.00. We believe that it is significant to the issue before you that all samples showed non-detectable levels of all chemicals except one location. The new Cricket Spring which is located downstream from the site approximately 100 yards showed 2.3 ppm pentachlorophenol. All other sites were negative. This evidence also proves that the spring itself is clearing up and will soon be below the objectionable levels of penta. We desire that this document be included in the record on the issue of site eligibility for NPL ranking.

The second document which we desire to have included in the records through our comments is marked Exhibit "B" and attached hereto. This document is a report from the engineer employed by the Ormond group to study the site and compile a ranking computation based on that firm's investigation and application of the HRS ranking formula. The engineering firm is Cranmer and Associates, Inc., of Little Rock, Arkansas. This HRS calculation report may have already been filed in your office, but I wanted to make sure that it is properly filed as a comment from my clients. As you can see from the report the CAI engineering firm has investigated the site and applied the formula to the facts and evidence found to exist and has concluded that the site merits a score well below the minimum Superfund required score.

The third document which we desire to submit to the record is a review document which we found in the Dallas file called Potential Hazardous Waste Site - Inspection Report. This document is marked Exhibit "C". It is submitted to support our position that this site is not so contaminated as to justify ranking on the NPL. The report was compiled by the Water Supply Branch of the Dallas office and forwarded to the Superfund Compliance Section. The report states that it is a follow up monitoring of ground and surface water near the inactive wood treatment facility known as Arkwood. The report states that, "Although some surface samples reveal some organics no contaminates were found in any domestic well samples. Surface contaminates do not effect any public water supply, but should certainly be addressed from a water pollution standpoint." The report recommends the installation of monitoring wells around the site to determine migration paths. The report also states that, "although not critical for present local well condition it is certainly worthwhile for possible future threats to groundwater".

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November 16, 1987

Monitoring of the site we do not oppose. Placement on the NPL we do oppose.

I am asking Ms. Merrick to hand carry this letter and attached documents to you for inclusion in the comments record on this issue of promulgation to the National Priorities List.

Very truly yours,

By: _____

Bill F Doshier
DOSHIER and BOWERS
ATTORNEYS FOR HALLIE C. ORMOND
and MARY F. BURKE, Landowners
(Referred to herein as the
ORMOND GROUP)
P. O. BOX 1797
HARRISON, AR 72602-1797
(501) 741-6166

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Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 14 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Dale Bumpers
United States Senate
Washington, D.C. 20510

Dear Senator Bumpers:

The purpose of this letter is to respond to your letter of November 19, 1987 regarding the Arkwood Inc. Site in Omaha, Arkansas. This site was proposed to the National Priorities List (NPL) on September 15, 1985.

In your letter you requested that the Environmental Protection Agency (EPA) consider the comments that you submitted on behalf of one of your constituents. As mentioned above, this site is currently proposed to the NPL. EPA is reviewing comments on the Arkwood Site, and anticipates announcing a final rulemaking decision regarding the inclusion of this site on the NPL in April 1988.

EPA places sites on the NPL using rulemaking procedures outlined in the Administrative Procedures Act. The Agency proposes sites to the NPL that are believed to meet both the technical requirements of the Hazard Ranking System (HRS) and the eligibility requirements of the NPL. The HRS is the technical evaluation model which considers hazards to public health and the environment which are associated with three contaminant migration pathways: ground water, surface water, and air. The HRS was designed to provide a consistent and objective evaluation of sites across the nation.

Site proposals are announced in the Federal Register, and are typically followed by a 60-day formal public comment period. The comment period for this site ended on November 18, 1985. The comment period affords all interested parties the opportunity to provide the Agency with information regarding a site. EPA considers and addresses all comments received during the formal comment period and, to the extent practicable, the Agency considers late comments. EPA considers comments to be a valuable source of information.

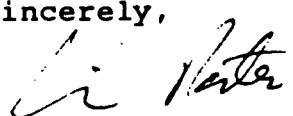
Because the development of the NPL is a rulemaking process, EPA cannot discuss specific comments received regarding the Arkwood Site or the effect that those comments may have on the HRS score for the site prior to final rulemaking. EPA will address all

comments in a document called the Support Document which will be available to the public at the time the final rule is signed by the Assistant Administrator. The Support Document provides the Agency's rationale for final listing decisions.

EPA has already received numerous comments regarding the Arkwood Site, and I can assure you that the Agency will carefully review these comments before making a final decision whether or not to add this site to the final NPL. Your letter of November 19, 1987, with attached comments from your constituent, will be included in the public docket, and to the extent practicable, will be considered.

I hope that this discussion will help you and your constituent to understand the NPL rulemaking process, and how that process applies to the Arkwood Site. Thank you very much for your interest, and please contact me if I can be of additional assistance.

Sincerely,


J. Winston Porter
Assistant Administrator

DOSHIER & BOWERS

BILL F. DOSHIER
DAN R. BOWERS

ATTORNEYS AT LAW

215 WEST RUSH
P.O. BOX 1797
HARRISON, ARKANSAS 72602-1797

TELEPHONE
501-741-8166

November 16, 1987

Mr. Steven Lingle, Director
Hazardous Site Evaluation Division
Environmental Protection Agency
401 M Street S.W.
Washington, DC 20510

RE: Arkwood Site
Omaha, Arkansas
Site No. ARDO84930148

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Very truly yours,

By: 

DOSHIER and BOWERS
ATTORNEYS FOR HALLIE C. ORMOND
and MARY F. BURKE, Landowners
(Referred to herein as the
ORMOND GROUP)
P. O. BOX 1797
HARRISON, AR 72602-1797
(501) 741-6166

BFD/db

Enclosures

TABLE 1

Sample Numbers and Locations
May 1987 Quarterly Sampling

Arkwood Inc. Site
Omaha, Arkansas

<u>ERM-SOUTHWEST, INC.</u>	<u>ENSECO</u>	<u>Owner/Location</u>
<u>Water Samples</u>		
O S-1	63653-009	Railroad Tunnel
2.3 ppm S-2	63653-010	New Cricket
O S-3	63653-001	Old Cricket
S-4	63653-002	Busby
S-10	63653-003	Valley north of site
S-26	63653-004	Valley southwest of site
S-33	63653-013	Walnut Creek Valley
S-36	63653-014	Walnut Creek Valley
S-43	63653-005	Center Sec. 34
S-48	63653-015	Walnut Creek Valley
S-49	63653-006	Valley north of site
S-50	63653-007	Cobb
S-51	63653-027	Vestal
S-80	63653-008	Field Blank
S-81	63653-016	Field Blank
S-82	63653-028	Field Blank
W-1	63653-020	White
W-2	63653-021	Miles
W-3	63653-022	Tate
W-4	63653-023	Tizen
W-6	63653-024	Cook
W-9	63653-019	Letterman
W-10	63653-029	Bishkey
W-11A	63653-017	Birmingham
W-11B	63653-018	Birmingham
W-15A	63653-025	Omaha (City)
W-15B	63653-026	Omaha (City)
W-22B	63653-031	Goddard
W-26	63653-030	Roberts
<u>Sediment Samples</u>		
O SED-1	63653-032	Cricket Spring Channel
P SED-2	63653-033	SE end of RR Tunnel
<u>ORGANICS</u>		

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-1Lab I.D.: R12-9 Enseco I.D.: 63653-009Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-1Laboratory I.D.: R12-9Enseco I.D.: 63653-009Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HS)

GANICS Cont.

Enseco Method 620/MOL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-2Laboratory I.D.: R12-10 Enseco I.D.: 63653-010Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	2.3	2300	ug/L
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

APPENDIX IX CHLORINATED DIOXINS ANALYSIS

Client Name: ERM-SOUTHWEST

Client ID: S-2

Laboratory ID: 63653-010

Enseco ID: 63653-010

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

Analyzed: 05/27/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Hexachlorodibenzodioxins	N.D.	ng/L	0.15
Hexachlorodibenzofurans	0.30	ng/L	-
Pentachlorodibenzodioxins	N.D.	ng/L	0.18
Pentachlorodibenzofurans	N.D.	ng/L	0.16
Tetrachlorodibenzodioxins	N.D.	ng/L	0.060
Tetrachlorodibenzofurans	N.D.	ng/L	0.036

N.D. = Not detected

Reported by: Kathy Heese

Approved by: Michael Brooks

Sample: 63653-010

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-2

Laboratory ID: 63653-010

Enseco ID: 63653-010

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	68	mg/L	0.1	200.7	05/27/87
Iron	1.0	mg/L	0.05	200.7	05/27/87
Magnesium	3.0	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.8	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-010

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-2

Laboratory ID: 63653-010

Enseco ID: 63653-010

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.04	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	336	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	210	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	8	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	9	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	162	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	162	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	0.1	mg/L	0.1	350.1	05/20/87
Total Cations	3.8	meq/L	0.1	104C	06/15/87
Total Anions	3.7	meq/L	0.3	104C	06/15/87
% Difference	2.1	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-010

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-3 **OLD CRICKET**Lab I.D.: R12-1 Enseco I.D.: 63653-001Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-3Laboratory I.D.: R12-1 Enseco I.D.: 63653-001Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-3Laboratory I.D.: R12-1Enseco I.D.: 63653-001Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-3

Laboratory ID: 63653-001

Enseco ID: 63653-001

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	43	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.1	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	3.1	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample 63653-001

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-3

Laboratory ID: 63653-001

Enseco ID: 63653-001

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.88	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	227	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	120	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	5	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.7	mg/L	0.1	353.2	05/20/87
Sulfate	6	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	94	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	94	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	2.5	meq/L	0.1	104C	06/18/87
Total Anions	2.3	meq/L	0.3	104C	06/18/87
% Difference	3.9	%	0.1	104C	06/18/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-001

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-1Laboratory I.D.: R12-9Enseco I.D.: 63653-009Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-1

Laboratory ID: 63653-009

Enseco ID: 63653-009

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	52	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.3	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	5.7	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-009

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-1

Laboratory ID: 63653-009

Enseco ID: 63653-009

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.72	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	305	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	170	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	22	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.5	mg/L	0.1	353.2	05/20/87
Sulfate	7	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	108	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	108	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	3.0	meq/L	0.1	104C	06/15/87
Total Anions	3.0	meq/L	0.3	104C	06/15/87
% Difference	N.D.	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-009

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest. Inc.Client I.D.: S-2Lab I.D.: R12-10 Enseco I.D.: 63653-010Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-2Laboratory I.D.: R12-10Enseco I.D.: 63653-010Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 8240/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: SED-1 CRICKET SPRING CHANNELLab I.D.: R12-32 Enseco I.D.: 63653-032Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/26/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/kg	10
Bromomethane	ND	ug/kg	10
Vinyl Chloride	ND	ug/kg	10
Chloroethane	ND	ug/kg	10
Methylene Chloride	ND	ug/kg	25
Acetone	ND	ug/kg	100
Carbon Disulfide	ND	ug/kg	5
1,1-Dichloroethene	ND	ug/kg	5
1,1-Dichloroethane	ND	ug/kg	5
1,2-Dichloroethene (cis/trans)	ND	ug/kg	5
Chloroform	ND	ug/kg	5
1,2-Dichloroethane	ND	ug/kg	5
2-Butanone	ND	ug/kg	40
1,1,1-Trichloroethane	ND	ug/kg	5
Carbon Tetrachloride	ND	ug/kg	5
Vinyl Acetate	ND	ug/kg	10
Bromodichloromethane	ND	ug/kg	5
1,2-Dichloropropane	ND	ug/kg	5
trans-1,3-Dichloropropene	ND	ug/kg	5
Trichloroethene	ND	ug/kg	5
Dibromochloromethane	ND	ug/kg	5
1,1,2-Trichloroethane	ND	ug/kg	5
Benzene	ND	ug/kg	5
cis-1,3-Dichloropropene	ND	ug/kg	5
2-Chloroethyl vinyl ether	ND	ug/kg	10
Bromoform	ND	ug/kg	5
4-Methyl-2-Pentanone	ND	ug/kg	10
2-Hexanone	ND	ug/kg	10
1,1,2,2-Tetrachloroethane	ND	ug/kg	5
Tetrachloroethene	ND	ug/kg	5
Toluene	ND	ug/kg	5
Chlorobenzene	ND	ug/kg	5
Ethyl benzene	ND	ug/kg	5
Styrene	ND	ug/kg	5
Total Xylenes	ND	ug/kg	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 8270/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: SED-1Laboratory I.D.: R12-32Enseco I.D.: 63653-032Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/26/87 Analyzed: 05/28/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
		<u>Wet wt.</u>	
Phenol	ND	ug/Kg	6600
bis(2-Chloroethyl)ether	ND	ug/Kg	6600
2-Chlorophenol	ND	ug/Kg	6600
1,3-Dichlorobenzene	ND	ug/Kg	6600
1,4-Dichlorobenzene	ND	ug/Kg	6600
Benzyl alcohol	ND	ug/Kg	6600
1,2-Dichlorobenzene	ND	ug/Kg	6600
2-Methylphenol	ND	ug/Kg	6600
bis(2-Chloroisopropyl)ether	ND	ug/Kg	6600
4-Methylphenol	ND	ug/Kg	6600
N-Nitroso-dipropylamine	ND	ug/Kg	6600
Hexachloroethane	ND	ug/Kg	6600
Nitrobenzene	ND	ug/Kg	6600
Isophorone	ND	ug/Kg	6600
2-Nitrophenol	ND	ug/Kg	6600
2,4-Dimethylphenol	ND	ug/Kg	6600
Benzoic Acid	ND	ug/Kg	32000
bis(2-Chloroethoxy)methane	ND	ug/Kg	6600
2,4-Dichlorophenol	ND	ug/Kg	6600
1,2,4-Trichlorobenzene	ND	ug/Kg	6600
Naphthalene	ND	ug/Kg	6600
4-Chloroaniline	ND	ug/Kg	6600
Hexachlorobutadiene	ND	ug/Kg	6600
4-Chloro-3-methylphenol	ND	ug/Kg	6600
2-Methylnaphthalene	ND	ug/Kg	6600
Hexachlorocyclopentadiene	ND	ug/Kg	6600
2,4,6-Trichlorophenol	ND	ug/Kg	6600
2,4,5-Trichlorophenol	ND	ug/Kg	32000
2-Chloronaphthalene	ND	ug/Kg	6600
2-Nitroaniline	ND	ug/Kg	32000
Dimethyl phthalate	ND	ug/Kg	6600
Acenaphthylene	ND	ug/Kg	6600
3-Nitroaniline	ND	ug/Kg	32000
Acenaphthene	ND	ug/Kg	6600

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 8270/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: SED-1Laboratory I.D.: R12-32Enseco I.D.: 63653-032Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/26/87 Analyzed: 05/28/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting</u>
		<u>Wet wt.</u>	<u>Limit</u>
2,4-Dinitrophenol	ND	ug/Kg	32000
4-Nitrophenol	ND	ug/Kg	32000
Dibenzofuran	ND	ug/Kg	6600
2,4-Dinitrotoluene	ND	ug/Kg	6600
2,6-Dinitrotoluene	ND	ug/Kg	6600
Diethyl phthalate	ND	ug/Kg	6600
4-Chlorophenyl phenyl ether	ND	ug/Kg	6600
Fluorene	ND	ug/Kg	6600
4-Nitroaniline	ND	ug/Kg	32000
4,6-Dinitro-2-methylphenol	ND	ug/Kg	32000
N-Nitrosodiphenylamine	ND	ug/Kg	6600
4-Bromophenyl phenyl ether	ND	ug/Kg	6600
Hexachlorobenzene	ND	ug/Kg	6600
Pentachlorophenol	ND	ug/Kg	32000
Phenanthrene	ND	ug/Kg	6600
Anthracene	ND	ug/Kg	6600
Di-n-butyl phthalate	ND	ug/Kg	6600
Fluoranthene	ND	ug/Kg	6600
Pyrene	ND	ug/Kg	6600
Butyl benzyl phthalate	ND	ug/Kg	6600
3,3'-Dichlorobenzidine	ND	ug/Kg	13200
Benzo(a)anthracene	ND	ug/Kg	6600
bis(2-Ethylhexyl)phthalate	ND	ug/Kg	6600
Chrysene	ND	ug/Kg	6600
Di-n-octyl phthalate	ND	ug/Kg	6600
Benzo(b)fluoranthene	ND	ug/Kg	6600
Benzo(k)fluoranthene	ND	ug/Kg	6600
Benzo(a)pyrene	ND	ug/Kg	6600
Indeno(1,2,3-c,d)pyrene	ND	ug/Kg	6600
Dibenzo(a,h)anthracene	ND	ug/Kg	6600
Benzo(g,h,i)perylene	ND	ug/Kg	6600

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: SED-1

Laboratory ID: 63653-032

Enseco ID: 63653-032

Matrix: Sediment

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units (as received)</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Antimony	N.D.	mg/kg	5	6010	06/04/87
Arsenic	2.0	mg/kg	0.6	7060	05/29/87
Beryllium	0.3	mg/kg	0.1	6010	06/04/87
Cadmium	N.D.	mg/kg	0.5	6010	06/04/87
Chromium	6	mg/kg	1	6010	06/04/87
Copper	7.9	mg/kg	0.6	6010	06/04/87
Lead	22	mg/kg	5	6010	06/04/87
Mercury	N.D.	mg/kg	0.05	7471	05/30/87
Nickel	15	mg/kg	4	6010	06/04/87
Selenium	N.D.	mg/kg	0.4	7740	06/01/87
Silver	N.D.	mg/kg	0.5	6010	06/04/87
Thallium	N.D.	mg/kg	0.8	7841	06/01/87
Zinc	65	mg/kg	1	6010	06/04/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-032

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: SED-1

Laboratory ID: 63653-032

Enseco ID: 63653-032

Matrix: Sediment

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units (as received)</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Total Cyanide	N.D.	mg/kg	0.5	9010	05/20/87
Phenolics	2	mg/kg	1	420.1	05/30/87

N.D. = Not detected

Approved by: Lindsay Bryce

Sample: 63653-032

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 8240/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: SED-2SE END RR TUNNELLab I.D.: R12-33 Enseco I.D.: 63653-033Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/27/87 Analyzed: 05/27/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/kg	10
Bromomethane	ND	ug/kg	10
Vinyl Chloride	ND	ug/kg	10
Chloroethane	ND	ug/kg	10
Methylene Chloride	ND	ug/kg	25
Acetone	ND	ug/kg	70
Carbon Disulfide	ND	ug/kg	5
1,1-Dichloroethene	ND	ug/kg	5
1,1-Dichloroethane	ND	ug/kg	5
1,2-Dichloroethene (cis/trans)	ND	ug/kg	5
Chloroform	ND	ug/kg	5
1,2-Dichloroethane	ND	ug/kg	5
2-Butanone	ND	ug/kg	25
1,1,1-Trichloroethane	ND	ug/kg	5
Carbon Tetrachloride	ND	ug/kg	5
Vinyl Acetate	ND	ug/kg	10
Bromodichloromethane	ND	ug/kg	5
1,2-Dichloropropane	ND	ug/kg	5
trans-1,3-Dichloropropene	ND	ug/kg	5
Trichloroethene	ND	ug/kg	5
Dibromochloromethane	ND	ug/kg	5
1,1,2-Trichloroethane	ND	ug/kg	5
Benzene	ND	ug/kg	5
cis-1,3-Dichloropropene	ND	ug/kg	5
2-Chloroethyl vinyl ether	ND	ug/kg	10
Bromoform	ND	ug/kg	5
4-Methyl-2-Pentanone	ND	ug/kg	10
2-Hexanone	ND	ug/kg	10
1,1,2,2-Tetrachloroethane	ND	ug/kg	5
Tetrachloroethene	ND	ug/kg	5
Toluene	ND	ug/kg	5
Chlorobenzene	ND	ug/kg	5
Ethyl benzene	ND	ug/kg	5
Styrene	ND	ug/kg	5
Total Xylenes	ND	ug/kg	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 8270/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: SED-2Laboratory I.D.: R12-33Enseco I.D.: 63653-033Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/26/87 Analyzed: 05/28/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
		<u>Wet wt.</u>	
Phenol	ND	ug/Kg	1650
bis(2-Chloroethyl)ether	ND	ug/Kg	1650
2-Chlorophenol	ND	ug/Kg	1650
1,3-Dichlorobenzene	ND	ug/Kg	1650
1,4-Dichlorobenzene	ND	ug/Kg	1650
Benzyl alcohol	ND	ug/Kg	1650
1,2-Dichlorobenzene	ND	ug/Kg	1650
2-Methylphenol	ND	ug/Kg	1650
bis(2-Chloroisopropyl)ether	ND	ug/Kg	1650
4-Methylphenol	ND	ug/Kg	1650
N-Nitroso-dipropylamine	ND	ug/Kg	1650
Hexachloroethane	ND	ug/Kg	1650
Nitrobenzene	ND	ug/Kg	1650
Isophorone	ND	ug/Kg	1650
2-Nitrophenol	ND	ug/Kg	1650
2,4-Dimethylphenol	ND	ug/Kg	1650
Benzoic Acid	ND	ug/Kg	8000
bis(2-Chloroethoxy)methane	ND	ug/Kg	1650
2,4-Dichlorophenol	ND	ug/Kg	1650
1,2,4-Trichlorobenzene	ND	ug/Kg	1650
Naphthalene	ND	ug/Kg	1650
4-Chloroaniline	ND	ug/Kg	1650
Hexachlorobutadiene	ND	ug/Kg	1650
4-Chloro-3-methylphenol	ND	ug/Kg	1650
2-Methylnaphthalene	ND	ug/Kg	1650
Hexachlorocyclopentadiene	ND	ug/Kg	1650
2,4,6-Trichlorophenol	ND	ug/Kg	1650
2,4,5-Trichlorophenol	ND	ug/Kg	8000
2-Chloronaphthalene	ND	ug/Kg	1650
2-Nitroaniline	ND	ug/Kg	8000
Dimethyl phthalate	ND	ug/Kg	1650
Acenaphthylene	2300	ug/Kg	1650
3-Nitroaniline	ND	ug/Kg	8000
Acenaphthene	ND	ug/Kg	1650

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 8270/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: SED-2SE END RR TUNNELLaboratory I.D.: R12-33Enseco I.D.: 63653-033Matrix: Soil Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/26/87 Analyzed: 05/28/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
		<u>Wet wt.</u>	
2,4-Dinitrophenol	ND	ug/Kg	8000
4-Nitrophenol	ND	ug/Kg	8000
Dibenzofuran	ND	ug/Kg	1650
2,4-Dinitrotoluene	ND	ug/Kg	1650
2,6-Dinitrotoluene	ND	ug/Kg	1650
Diethyl phthalate	ND	ug/Kg	1650
4-Chlorophenyl phenyl ether	ND	ug/Kg	1650
Fluorene	ND	ug/Kg	1650
4-Nitroaniline	ND	ug/Kg	8000
4,6-Dinitro-2-methylphenol	ND	ug/Kg	8000
N-Nitrosodiphenylamine	ND	ug/Kg	1650
4-Bromophenyl phenyl ether	ND	ug/Kg	1650
Hexachlorobenzene	ND	ug/Kg	1650
Pentachlorophenol	ND	ug/Kg	8000
Phenanthrene	ND	ug/Kg	1650
Anthracene	3700	ug/Kg	1650
Di-n-butyl phthalate	ND	ug/Kg	1650
Fluoranthene	ND-2500*	ug/Kg	1650
Pyrene	5400	ug/Kg	1650
Butyl benzyl phthalate	ND	ug/Kg	1650
3,3'-Dichlorobenzidine	ND	ug/Kg	3300
Benzo(a)anthracene	3000	ug/Kg	1650
bis(2-Ethylhexyl)phthalate	ND	ug/Kg	1650
Chrysene	2500	ug/Kg	1650
Di-n-octyl phthalate	ND	ug/Kg	1650
Benzo(b)fluoranthene	3400+	ug/Kg	1650
Benzo(k)fluoranthene	--	-----	----
Benzo(a)pyrene	ND	ug/Kg	1650
Indeno(1,2,3-c,d)pyrene	ND	ug/Kg	1650
Dibenzo(a,h)anthracene	ND	ug/Kg	1650
Benzo(g,h,i)perylene	ND	ug/Kg	1650

*Reported as the sum of benzo(b)fluoranthene and benzo(k)fluoranthene

ND = Not Detected

NA = Not Applicable

* Correction noted in letter from Enseco dated 7/31/87.

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: SED-2

Laboratory ID: 63653-033

Enseco ID: 63653-033

Matrix: Sediment

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units (as received)</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Antimony	N.D.	mg/kg	5	6010	06/04/87
Arsenic	2.0	mg/kg	0.6	7060	05/29/87
Beryllium	0.3	mg/kg	0.1	6010	06/04/87
Cadmium	N.D.	mg/kg	0.5	6010	06/04/87
Chromium	5	mg/kg	1	6010	06/04/87
Copper	17	mg/kg	0.6	6010	06/04/87
Lead	30	mg/kg	5	6010	06/04/87
Mercury	0.24	mg/kg	0.05	7471	05/30/87
Nickel	15	mg/kg	4	6010	06/04/87
Selenium	N.D.	mg/kg	0.4	7740	06/01/87
Silver	N.D.	mg/kg	0.5	6010	06/04/87
Thallium	N.D.	mg/kg	0.8	7841	06/01/87
Zinc	110	mg/kg	1	6010	06/04/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-033

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: SED-2

Laboratory ID: 63653-033

Enseco ID: 63653-033

Matrix: Sediment

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units (as received)</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Total Cyanide	N.D.	mg/kg	0.5	9010	05/20/87
Phenolics	N.D.	mg/kg	1	420.1	05/30/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-033

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-4Lab I.D.: R12-2 Enseco I.D.: 63653-002Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-4Laboratory I.D.: R12-2Enseco I.D.: 63653-002Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-4Laboratory I.D.: R12-2 Enseco I.D.: 63653-002Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-4

Laboratory ID: 63653-002

Enseco ID: 63653-002

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	42	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	1.9	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	3.7	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-002

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-4

Laboratory ID: 63653-002

Enseco ID: 63653-002

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.84	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	227	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	150	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	8	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.1	mg/L	0.1	353.2	05/20/87
Sulfate	7	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	90	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	2.4	meq/L	0.1	104C	06/15/87
Total Anions	2.2	meq/L	0.3	104C	06/15/87
% Difference	3.5	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-002

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-10Lab I.D.: R12-3 Enseco I.D.: 63653-003Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-10Laboratory I.D.: R12-3Enseco I.D.: 63653-003Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA-Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-10Laboratory I.D.: R12-3Enseco I.D.: 63653-003Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-10

Laboratory ID: 63653-003

Enseco ID: 63653-003

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	48	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.5	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.9	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-003

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-10

Laboratory ID: 63653-003

Enseco ID: 63653-003

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	8.18	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	251	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	78	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	8	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	116	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	0.1	mg/L	0.1	350.1	05/20/87
Total Cations	2.7	meq/L	0.1	104C	06/15/87
Total Anions	2.5	meq/L	0.3	104C	06/15/87
% Difference	3.7	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-003

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-26Lab I.D.: R12-4 Enseco I.D.: 63653-004Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-26Laboratory I.D.: R12-4Enseco I.D.: 63653-004Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-26Laboratory I.D.: R12-4Enseco I.D.: 63653-004Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

Enseco

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-26

Laboratory ID: 63653-004

Enseco ID: 63653-004

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	67	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.7	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	6.4	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-004

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-26

Laboratory ID: 63653-004

Enseco ID: 63653-004

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.92	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	382	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	260	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	36	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.7	mg/L	0.1	353.2	05/20/87
Sulfate	6	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	121	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	3.8	meq/L	0.1	104C	06/15/87
Total Anions	3.6	meq/L	0.3	104C	06/15/87
% Difference	3.1	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-004

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest. Inc.Client I.D.: S-43Lab I.D.: R12-5 Enseco I.D.: 63653-005Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-43Laboratory I.D.: R12-5Enseco I.D.: 63653-005Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-43Laboratory I.D.: R12-5 Enseco I.D.: 63653-005Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

Enseco

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-43

Laboratory ID: 63653-005

Enseco ID: 63653-005

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	92	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	3.6	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	4.0	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-005

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-43

Laboratory ID: 63653-005

Enseco ID: 63653-005

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	8.14	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	457	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	230	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	10	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.5	mg/L	0.1	353.2	05/20/87
Sulfate	12	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	209	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	5.1	meq/L	0.1	104C	06/18/87
Total Anions	4.8	meq/L	0.3	104C	06/18/87
% Difference	2.5	%	0.1	104C	06/18/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-005

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-49Lab I.D.: R12-6 Enseco I.D.: 63653-006Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-49Laboratory I.D.: R12-6Enseco I.D.: 63653-006Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont..

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-49Laboratory I.D.: R12-6 Enseco I.D.: 63653-006Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-49

Laboratory ID: 63653-006

Enseco ID: 63653-006

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	69	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	4.2	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	9.2	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-006

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-49

Laboratory ID: 63653-006

Enseco ID: 63653-006

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.84	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	408	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	200	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	27	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.7	mg/L	0.1	353.2	05/20/87
Sulfate	8	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	149	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	4.2	meq/L	0.1	104C	06/15/87
Total Anions	4.0	meq/L	0.3	104C	06/15/87
% Difference	1.9	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-006

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-50Lab I.D.: R12-7 Enseco I.D.: 63653-007Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-50Laboratory I.D.: R12-7Enseco I.D.: 63653-007Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-50Laboratory I.D.: R12-7Enseco I.D.: 63653-007Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-50

Laboratory ID: 63653-007

Enseco ID: 63653-007

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	40	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.2	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.5	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-007

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-50

Laboratory ID: 63653-007

Enseco ID: 63653-007

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.83	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	219	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	90	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	7	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	98	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	2.2	meq/L	0.1	104C	06/15/87
Total Anions	2.1	meq/L	0.3	104C	06/15/87
% Difference	3.0	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-007

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-80Lab I.D.: R12-8 Enseco I.D.: 63653-008Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	52	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-80Laboratory I.D.: R12-8Enseco I.D.: 63653-008Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	NO	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	NO	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	NO	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-80Laboratory I.D.: R12-8Enseco I.D.: 63653-008Matrix: Water Sampled: 05/12/87 Received: 05/15/87Authorized: 05/15/87 Prepared: 05/18/87 Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-80

Laboratory ID: 63653-008

Enseco ID: 63653-008

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	3.3	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	0.2	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	0.26	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-008

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-80

Laboratory ID: 63653-008

Enseco ID: 63653-008

Matrix: Water

Sampled: 05/12/87

Received: 05/14/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	6.93	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	36	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	N.D.	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	6	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	11	mg/L	5	310.1/403	05/14/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/14/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	0.2	meq/L	0.1	104C	06/15/87
Total Anions	0.4	meq/L	0.3	104C	06/15/87
% Difference	30	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-008

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-33Lab I.D.: R12-13 Enseco I.D.: 63653-013Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-33Laboratory I.D.: R12-13 Enseco I.D.: 63653-013Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Choronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-33Laboratory I.D.: R12-13Enseco I.D.: 63653-013Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-33

Laboratory ID: 63653-013

Enseco ID: 63653-013

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	40	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.1	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	4.7	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-013

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-33

Laboratory ID: 63653-013

Enseco ID: 63653-013

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.95	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	218	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	140	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	10	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.9	mg/L	0.1	353.2	05/20/87
Sulfate	6	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	89	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	89	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	2.4	meq/L	0.1	104C	06/15/87
Total Anions	2.3	meq/L	0.3	104C	06/15/87
% Difference	1.1	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-013

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-36Lab I.D.: R12-14 Enseco I.D.: 63653-014Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-36Laboratory I.D.: R12-14Enseco I.D.: 63653-014Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-36Laboratory I.D.: R12-14 Enseco I.D.: 63653-014Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-36

Laboratory ID: 63653-014

Enseco ID: 63653-014

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	61	mg/L	0.1	200.7	05/27/87
Iron	0.05	mg/L	0.05	200.7	05/27/87
Magnesium	5.7	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	5.4	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-014

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-36

Laboratory ID: 63653-014

Enseco ID: 63653-014

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.58	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	339	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	190	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	15	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	1.1	mg/L	0.1	353.2	05/20/87
Sulfate	10	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	145	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	145	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	3.8	meq/L	0.1	104C	06/15/87
Total Anions	3.6	meq/L	0.3	104C	06/15/87
% Difference	1.9	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-014

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-48Lab I.D.: R12-15 Enseco I.D.: 63653-015Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/19/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-48Laboratory I.D.: R12-15Enseco I.D.: 63653-015Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-48Laboratory I.D.: R12-15Enseco I.D.: 63653-015Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-48

Laboratory ID: 63653-015

Enseco ID: 63653-015

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	46	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.2	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.6	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-015

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-48

Laboratory ID: 63653-015

Enseco ID: 63653-015

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.64	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	229	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	80	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	7	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	112	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	112	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	2.5	meq/L	0.1	104C	06/15/87
Total Anions	2.4	meq/L	0.3	104C	06/15/87
% Difference	3.3	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-015

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-81Lab I.D.: R12-16 Enseco I.D.: 63653-016Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	41	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-81Laboratory I.D.: R12-16 Enseco I.D.: 63653-016Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-81Laboratory I.D.: R12-16Enseco I.D.: 63653-016Matrix: Water Sampled: 05/13/87 Received: 05/16/87Authorized: 05/16/87 Prepared: 05/19/87 Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-81

Laboratory ID: 63653-016

Enseco ID: 63653-016

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	N.D.	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	N.D.	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	N.D.	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-016

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-81

Laboratory ID: 63653-016

Enseco ID: 63653-016

Matrix: Water

Sampled: 05/13/87

Received: 05/15/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	4.85	units	0.01	150.1	05/15/87
Specific Conductance @ 25C	16	umhos/cm	1	120.1/9050	05/15/87
Total Dissolved Solids	N.D.	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/21/87
Sulfate	N.D.	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Bicarb. Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/15/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	N.D.	meq/L	0.1	104C	06/15/87
Total Anions	N.D.	meq/L	0.3	104C	06/15/87
% Difference	N.D.	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-016

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-11ALab I.D.: R12-17 Enseco I.D.: 63653-017Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-11ALaboratory I.D.: R12-17Enseco I.D.: 63653-017Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-11ALaboratory I.D.: R12-17Enseco I.D.: 63653-017Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-IIA

Laboratory ID: 63653-017

Enseco ID: 63653-017

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	66	mg/L	0.1	200.7	05/27/87
Iron	0.06	mg/L	0.05	200.7	05/27/87
Magnesium	33	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.6	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-017

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-11A

Laboratory ID: 63653-017

Enseco ID: 63653-017

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.81	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	498	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	240	mg/L	10	160.1	05/20/87
Fluoride	0.2	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/20/87
Sulfate	57	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	224	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	224	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	6.1	meq/L	0.1	104C	06/15/87
Total Anions	5.7	meq/L	0.3	104C	06/15/87
% Difference	3.5	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-017

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-11BLab I.D.: R12-18 Enseco I.D.: 63653-018Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-118Laboratory I.D.: R12-18 Enseco I.D.: 63653-018Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA-Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-11BLaboratory I.D.: R12-18Enseco I.D.: 63653-018Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-11B

Laboratory ID: 63653-018

Enseco ID: 63653-018

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	44	mg/L	0.1	200.7	05/27/87
Iron	1.7	mg/L	0.05	200.7	05/27/87
Magnesium	19	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.7	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-018

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-11B

Laboratory ID: 63653-018

Enseco ID: 63653-018

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.68	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	319	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	260	mg/L	10	160.1	05/20/87
Fluoride	0.5	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	17	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	165	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	165	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	3.9	meq/L	0.1	104C	06/15/87
Total Anions	3.7	meq/L	0.3	104C	06/15/87
% Difference	3.1	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-018

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-9Lab I.D.: R12-19 Enseco I.D.: 63653-019Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/16/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-9Laboratory I.D.: R12-19 Enseco I.D.: 63653-019Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-9Laboratory I.D.: R12-19Enseco I.D.: 63653-019Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-9

Laboratory ID: 63653-019

Enseco ID: 63653-019

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	67	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	33	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.5	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-019

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-9

Laboratory ID: 63653-019

Enseco ID: 63653-019

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.85	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	488	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	310	mg/L	10	160.1	05/20/87
Fluoride	0.3	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	63	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	226	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	226	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	6.1	meq/L	0.1	104C	06/15/87
Total Anions	5.9	meq/L	0.3	104C	06/15/87
% Difference	2.3	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-019

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-1Lab I.D.: R12-20 Enseco I.D.: 63653-020Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-1Laboratory I.D.: R12-20Enseco I.D.: 63653-020Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-1Laboratory I.D.: R12-20 Enseco I.D.: 63653-020Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

Enseco

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-1

Laboratory ID: 63653-020

Enseco ID: 63653-020

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	88	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	41	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.5	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-020

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-1

Laboratory ID: 63653-020

Enseco ID: 63653-020

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.33	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	601	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	410	mg/L	10	160.1	05/20/87
Fluoride	0.2	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/20/87
Sulfate	105	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	267	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	267	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	7.8	meq/L	0.1	104C	06/15/87
Total Anions	7.5	meq/L	0.3	104C	06/15/87
% Difference	1.9	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-020

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-2Lab I.D.: R12-21 Enseco I.D.: 63653-021Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-2Laboratory I.D.: R12-21Enseco I.D.: 63653-021Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA-Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-2Laboratory I.D.: R12-21 Enseco I.D.: 63653-021Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-2

Laboratory ID: 63653-021

Enseco ID: 63653-021

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	78	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	33	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.1	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-021

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-2

Laboratory ID: 63653-021

Enseco ID: 63653-021

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.48	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	510	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	320	mg/L	10	160.1	05/20/87
Fluoride	0.2	mg/L	0.1	340.2	05/23/87
Chloride	4	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	75	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	235	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	235	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	6.7	meq/L	0.1	104C	06/15/87
Total Anions	6.4	meq/L	0.3	104C	06/15/87
% Difference	2.4	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-021

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-3Lab I.D.: R12-22 Enseco I.D.: 63653-022Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-3Laboratory I.D.: R12-22Enseco I.D.: 63653-022Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-3Laboratory I.D.: R12-22Enseco I.D.: 63653-022Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/20/87 Analyzed: 05/22/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-3

Laboratory ID: 63653-022

Enseco ID: 63653-022

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	76	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	23	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	3.0	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample 63653-022

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-3

Laboratory ID: 63653-022

Enseco ID: 63653-022

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.45	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	408	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	330	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	8	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.5	mg/L	0.1	353.2	05/20/87
Sulfate	24	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	244	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	244	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	5.8	meq/L	0.1	104C	06/15/87
Total Anions	5.6	meq/L	0.3	104C	06/15/87
% Difference	1.5	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-022

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-4Lab I.D.: R12-23 Enseco I.D.: 63653-023Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-4Laboratory I.D.: R12-23 Enseco I.D.: 63653-023Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/20/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA-Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-4Laboratory I.D.: R12-23Enseco I.D.: 63653-023Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/20/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-4

Laboratory ID: 63653-023

Enseco ID: 63653-023

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	95	mg/L	0.1	200.7	05/27/87
Iron	2.8	mg/L	0.05	200.7	05/27/87
Magnesium	47	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.0	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-023

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-4

Laboratory ID: 63653-023

Enseco ID: 63653-023

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.40	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	689	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	380	mg/L	10	160.1	05/20/87
Fluoride	0.4	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/20/87
Sulfate	145	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	273	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	273	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	8.8	meq/L	0.1	104C	06/15/87
Total Anions	8.5	meq/L	0.3	104C	06/15/87
% Difference	2.0	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-023

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-6Lab I.D.: R12-24 Enseco I.D.: 63653-024Matrix: Water Sampled: 05/14/87 Received: 05/18/87Authorized: 05/18/87 Prepared: NA Analyzed: 05/20/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-6Laboratory I.D.: R12-24Enseco I.D.: 63653-024Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-6Laboratory I.D.: R12-24Enseco I.D.: 63653-024Matrix: Water Sampled: 05/14/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-6

Laboratory ID: 63653-024

Enseco ID: 63653-024

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	63	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	34	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	1.9	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-024

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-6

Laboratory ID: 63653-024

Enseco ID: 63653-024

Matrix: Water

Sampled: 05/14/87

Received: 05/16/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.53	units	0.01	150.1	05/16/87
Specific Conductance @ 25C	488	umhos/cm	1	120.1/9050	05/16/87
Total Dissolved Solids	280	mg/L	10	160.1	05/20/87
Fluoride	0.2	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	57	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	234	mg/L	5	310.1/403	05/16/87
Bicarb. Alkalinity as CaCO ₃	234	mg/L	5	310.1/403	05/16/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/16/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	6.0	meq/L	0.1	104C	06/15/87
Total Anions	5.9	meq/L	0.3	104C	06/15/87
% Difference	1.2	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-024

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-15ALab I.D.: R12-25 Enseco I.D.: 63653-025Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-15ALaboratory I.D.: R12-25 Enseco I.D.: 63653-025Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Choronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-15ALaboratory I.D.: R12-25 Enseco I.D.: 63653-025Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-15A

Laboratory ID: 63653-025

Enseco ID: 63653-025

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	60	mg/L	0.1	200.7	05/27/87
Iron	0.12	mg/L	0.05	200.7	05/27/87
Magnesium	31	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.3	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-025

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-15A

Laboratory ID: 63653-025

Enseco ID: 63653-025

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.92	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	470	umhos/cm	1	120.1/9050	05/21/87
Total Dissolved Solids	230	mg/L	10	160.1	05/20/87
Fluoride	0.4	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/20/87
Sulfate	69	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	206	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	206	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	5.7	meq/L	0.1	104C	06/15/87
Total Anions	5.6	meq/L	0.3	104C	06/15/87
% Difference	0.7	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-025

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest. Inc.Client I.D.: W-15BLab I.D.: R12-26 Enseco I.D.: 63653-026Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-15BLaboratory I.D.: R12-26 Enseco I.D.: 63653-026Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	NQ	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-158Laboratory I.D.: R12-26 Enseco I.D.: 63653-026Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-15B

Laboratory ID: 63653-026

Enseco ID: 63653-026

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	53	mg/L	0.1	200.7	05/27/87
Iron	0.06	mg/L	0.05	200.7	05/27/87
Magnesium	25	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.0	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-026

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-15B

Laboratory ID: 63653-026

Enseco ID: 63653-026

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.93	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	399	umhos/cm	1	120.1/9050	05/21/87
Total Dissolved Solids	210	mg/L	10	160.1	05/20/87
Fluoride	0.3	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	N.D.	mg/L	0.1	353.2	05/20/87
Sulfate	38	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	195	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	195	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	4.8	meq/L	0.1	104C	06/15/87
Total Anions	4.7	meq/L	0.3	104C	06/15/87
% Difference	0.9	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-026

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-51Lab I.D.: R12-27 Enseco I.D.: 63653-027Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-51Laboratory I.D.: R12-27Enseco I.D.: 63653-027Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-51Laboratory I.D.: R12-27Enseco I.D.: 63653-027Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-51

Laboratory ID: 63653-027

Enseco ID: 63653-027

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	76	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	2.8	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	12	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-027

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-51

Laboratory ID: 63653-027

Enseco ID: 63653-027

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.58	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	441	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	330	mg/L	10	160.1	05/20/87
Fluoride	0.1	mg/L	0.1	340.2	05/23/87
Chloride	69	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	2.1	mg/L	0.1	353.2	05/20/87
Sulfate	N.D.	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	110	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	110	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	0.2	mg/L	0.1	350.1	05/20/87
Total Cations	4.6	meq/L	0.1	104C	06/15/87
Total Anions	4.3	meq/L	0.3	104C	06/15/87
% Difference	2.9	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-027

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-82Lab I.D.: R12-28 Enseco I.D.: 63653-028Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	38	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: S-82Laboratory I.D.: R12-28 Enseco I.D.: 63653-028Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: S-82Laboratory I.D.: R12-28Enseco I.D.: 63653-028Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-82

Laboratory ID: 63653-028

Enseco ID: 63653-028

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	N.D.	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	N.D.	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	N.D.	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-028

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: S-82

Laboratory ID: 63653-028

Enseco ID: 63653-028

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	6.19	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	8	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	N.D.	mg/L	10	160.1	05/20/87
Fluoride	N.D.	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.1	mg/L	0.1	353.2	05/20/87
Sulfate	N.D.	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	10	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	10	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	N.D.	meq/L	0.1	104C	06/15/87
Total Anions	N.D.	meq/L	0.3	104C	06/15/87
% Difference	N.D.	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-028

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-10Lab I.D.: R12-29 Enseco I.D.: 63653-029Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-10Laboratory I.D.: R12-29Enseco I.D.: 63653-029Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-10Laboratory I.D.: R12-29Enseco I.D.: 63653-029Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-10

Laboratory ID: 63653-029

Enseco ID: 63653-029

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	67	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	29	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.1	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-029

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-10

Laboratory ID: 63653-029

Enseco ID: 63653-029

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.84	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	524	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	270	mg/L	10	160.1	05/20/87
Fluoride	0.4	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	59	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	216	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	216	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	5.8	meq/L	0.1	104C	06/15/87
Total Anions	5.6	meq/L	0.3	104C	06/15/87
% Difference	2.1	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-029

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-26Lab I.D.: R12-30 Enseco I.D.: 63653-030Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-26Laboratory I.D.: R12-30Enseco I.D.: 63653-030Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA=Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-26Laboratory I.D.: R12-30Enseco I.D.: 63653-030Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-26

Laboratory ID: 63653-030

Enseco ID: 63653-030

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	129	mg/L	0.1	200.7	05/27/87
Iron	0.12	mg/L	0.05	200.7	05/27/87
Magnesium	5.3	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	4.5	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-030

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-26

Laboratory ID: 63653-030

Enseco ID: 63653-030

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.52	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	637	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	370	mg/L	10	160.1	05/20/87
Fluoride	0.1	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	4.1	mg/L	0.1	353.2	05/20/87
Sulfate	30	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	294	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	294	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	N.D.	mg/L	0.1	350.1	05/20/87
Total Cations	7.1	meq/L	0.1	104C	06/15/87
Total Anions	6.8	meq/L	0.3	104C	06/15/87
% Difference	2.0	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-030

HAZARDOUS SUBSTANCE LIST (HSL) VOLATILE ORGANICS

Enseco Method 624/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-22BLab I.D.: R12-31 Enseco I.D.: 63653-031Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: NA Analyzed: 05/21/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Chloromethane	ND	ug/L	10
Bromomethane	ND	ug/L	10
Vinyl Chloride	ND	ug/L	10
Chloroethane	ND	ug/L	10
Methylene Chloride	ND	ug/L	25
Acetone	ND	ug/L	25
Carbon Disulfide	ND	ug/L	5
1,1-Dichloroethene	ND	ug/L	5
1,1-Dichloroethane	ND	ug/L	5
1,2-Dichloroethene (cis/trans)	ND	ug/L	5
Chloroform	ND	ug/L	5
1,2-Dichloroethane	ND	ug/L	5
2-Butanone	ND	ug/L	25
1,1,1-Trichloroethane	ND	ug/L	5
Carbon Tetrachloride	ND	ug/L	5
Vinyl Acetate	ND	ug/L	10
Bromodichloromethane	ND	ug/L	5
1,2-Dichloropropane	ND	ug/L	5
trans-1,3-Dichloropropene	ND	ug/L	5
Trichloroethene	ND	ug/L	5
Dibromochloromethane	ND	ug/L	5
1,1,2-Trichloroethane	ND	ug/L	5
Benzene	ND	ug/L	5
cis-1,3-Dichloropropene	ND	ug/L	5
2-Chloroethyl vinyl ether	ND	ug/L	10
Bromoform	ND	ug/L	5
4-Methyl-2-Pentanone	ND	ug/L	10
2-Hexanone	ND	ug/L	10
1,1,2,2-Tetrachloroethane	ND	ug/L	5
Tetrachloroethene	ND	ug/L	5
Toluene	ND	ug/L	5
Chlorobenzene	ND	ug/L	5
Ethyl benzene	ND	ug/L	5
Styrene	ND	ug/L	5
Total Xylenes	ND	ug/L	5

ND = Not Detected

NA = Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS

Enseco Method 625/HSL List

Client Name: ERM - Southwest, Inc.Client I.D.: W-22BLaboratory I.D.: R12-31Enseco I.D.: 63653-031Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
Phenol	ND	ug/L	10
bis(2-Chloroethyl)ether	ND	ug/L	10
2-Chlorophenol	ND	ug/L	10
1,3-Dichlorobenzene	ND	ug/L	10
1,4-Dichlorobenzene	ND	ug/L	10
Benzyl alcohol	ND	ug/L	10
1,2-Dichlorobenzene	ND	ug/L	10
2-Methylphenol	ND	ug/L	10
bis(2-Chloroisopropyl)ether	ND	ug/L	10
4-Methylphenol	ND	ug/L	10
N-Nitroso-dipropylamine	ND	ug/L	10
Hexachloroethane	ND	ug/L	10
Nitrobenzene	ND	ug/L	10
Isophorone	ND	ug/L	10
2-Nitrophenol	ND	ug/L	10
2,4-Dimethylphenol	ND	ug/L	10
Benzoic Acid	ND	ug/L	50
bis(2-Chloroethoxy)methane	ND	ug/L	10
2,4-Dichlorophenol	ND	ug/L	10
1,2,4-Trichlorobenzene	ND	ug/L	10
Naphthalene	ND	ug/L	10
4-Chloroaniline	ND	ug/L	10
Hexachlorobutadiene	ND	ug/L	10
4-Chloro-3-methylphenol	ND	ug/L	10
2-Methylnaphthalene	ND	ug/L	10
Hexachlorocyclopentadiene	ND	ug/L	10
2,4,6-Trichlorophenol	ND	ug/L	10
2,4,5-Trichlorophenol	ND	ug/L	50
2-Chloronaphthalene	ND	ug/L	10
2-Nitroaniline	ND	ug/L	50
Dimethyl phthalate	ND	ug/L	10
Acenaphthylene	ND	ug/L	10
3-Nitroaniline	ND	ug/L	50
Acenaphthene	ND	ug/L	10

ND=Not Detected

NA-Not Applicable

HAZARDOUS SUBSTANCE LIST (HSL) SEMIVOLATILE ORGANICS Cont.

Enseco Method 625/HSL List

Client Name: ERM-Southwest, Inc.Client I.D.: W-22BLaboratory I.D.: R12-31 Enseco I.D.: 63653-031Matrix: Water Sampled: 05/15/87 Received: 05/19/87Authorized: 05/19/87 Prepared: 05/21/87 Analyzed: 05/26/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>
2,4-Dinitrophenol	ND	ug/L	50
4-Nitrophenol	ND	ug/L	50
Dibenzofuran	ND	ug/L	10
2,4-Dinitrotoluene	ND	ug/L	10
2,6-Dinitrotoluene	ND	ug/L	10
Diethyl phthalate	ND	ug/L	10
4-Chlorophenyl phenyl ether	ND	ug/L	10
Fluorene	ND	ug/L	10
4-Nitroaniline	ND	ug/L	50
4,6-Dinitro-2-methylphenol	ND	ug/L	50
N-Nitrosodiphenylamine	ND	ug/L	10
4-Bromophenyl phenyl ether	ND	ug/L	10
Hexachlorobenzene	ND	ug/L	10
Pentachlorophenol	ND	ug/L	50
Phenanthrene	ND	ug/L	10
Anthracene	ND	ug/L	10
Di-n-butyl phthalate	ND	ug/L	10
Fluoranthene	ND	ug/L	10
Pyrene	ND	ug/L	10
Butyl benzyl phthalate	ND	ug/L	10
3,3'-Dichlorobenzidine	ND	ug/L	20
Benzo(a)anthracene	ND	ug/L	10
bis(2-Ethylhexyl)phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-c,d)pyrene	ND	ug/L	10
Dibenzo(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

ND = Not Detected

NA = Not Applicable

METALS PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-22B

Laboratory ID: 63653-031

Enseco ID: 63653-031

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
Calcium	52	mg/L	0.1	200.7	05/27/87
Iron	N.D.	mg/L	0.05	200.7	05/27/87
Magnesium	27	mg/L	0.1	200.7	05/27/87
Potassium	N.D.	mg/L	5	200.7	05/27/87
Sodium	2.5	mg/L	0.05	200.7	05/27/87

N.D. = Not detected

Approved by: Will Pratt

Sample: 63653-031

INORGANIC PARAMETERS

Client Name: ERM-SOUTHWEST

Client ID: W-22B

Laboratory ID: 63653-031

Enseco ID: 63653-031

Matrix: Water

Sampled: 05/15/87

Received: 05/18/87

Authorized: 05/14/87

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Analytical Method</u>	<u>Analyzed</u>
pH	7.93	units	0.01	150.1	05/20/87
Specific Conductance @ 25C	453	umhos/cm	1	120.1/9050	05/20/87
Total Dissolved Solids	270	mg/L	10	160.1	05/20/87
Fluoride	0.4	mg/L	0.1	340.2	05/23/87
Chloride	N.D.	mg/L	3	300.0	05/21/87
Nitrate + Nitrite as N	0.2	mg/L	0.1	353.2	05/20/87
Sulfate	45	mg/L	5	300.0	05/21/87
Total Alkalinity as CaCO ₃	197	mg/L	5	310.1/403	05/20/87
Bicarb. Alkalinity as CaCO ₃	197	mg/L	5	310.1/403	05/20/87
Carbonate Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Hydroxide Alkalinity as CaCO ₃	N.D.	mg/L	5	310.1/403	05/20/87
Ammonia as N	0.2	mg/L	0.1	350.1	05/20/87
Total Cations	4.9	meq/L	0.1	104C	06/15/87
Total Anions	4.9	meq/L	0.3	104C	06/15/87
% Difference	0.3	%	0.1	104C	06/15/87

N.D. = Not detected

Approved by: Lindsay Breyer

Sample: 63653-031

REVIEW

Potential Hazardous Waste Site - Inspection Report

Exhibit
"C"

RECEIVED

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Site Name Arkwood, Inc.

LEED TOWNSHIP: FOUNTAIN PLACE

Site Location Omaha, ARSite Number ARD08493014B Date of Survey 7/29/87

REPLY TO: 6H-SP

Inspected by _____ State NE / TAT
MEMORANDUM

Other (specify) _____

DATE: August 31, 1987Received From MCKee

SUBJECT: Potential Hazardous Waste Site - Site Inspection Report

Date rec'd by Water Supply Branch 8/21/87

FROM: Oscar Cebra, Jr., P.E.

Type samples: Chief

Water Supply Branch (6H-SP)

+ Spring

 on-site on-site on-site on-site SOIL MARTIN SURFACE WATER GROUND WATER DRINKING WATER off-site off-site off-site off-site

Superfund Compliance Sector (6H-SP).

Type contaminant(s):

 ORGANICS to the INORGANICS RADIONUCLIDES MICROBIOLOGICAL

Summary: This report summarizes findings from monitoring of ground water, surface water near an inactive wood treating facility. Although some surface water samples revealed organic contaminants were found in than domestic well samples, surface contaminants do not affect an public water supply, but should certainly be addressed from a water pollution stand point. FIT recommends the installation of monitoring wells around the site to determine migration pathways. Although not critical for present local well condition, it is certainly worthwhile for future treat to groundwater.

Concurrence:

F. Warren Morris 8/24/87

F. Warren Morris 8/24/87

Signature and Date

OERR INFORMATION FORM

ITEM #: AL-704074

ACTIVITY	HSCD	ERD	HSED	OPM	IOD
Prepare Briefing/ Talking Points					
Concur/ Comment on Pkg					
Prepare Approp. Response			✓		
FOIA Request					
Information Request					
OD# POD#					

NOV 27 1987

SUBJECT: ARKWOOD SITE/NATIONAL PRIORITIES LIST

FROM: BUMPERS

DATE ASSIGNED: 11/27/87 DATE DUE: 12/04/87 RETURN TO: *filler*

COMMENTS:

ATTACHMENT: YES NO CONCURRENCE: YES NO (if appropriate)

PROGRAM CONTACT:

(Name)

(Program)

(Phone)